



Amy G. Rabinowitz  
*Counsel*

October 28, 2003

Mary L. Cottrell, Secretary  
Department of Telecommunications and Energy  
One South Station  
Boston, MA 02110

**Re: D.T.E. 03-20**

Dear Secretary Cottrell:

On behalf of Massachusetts Electric Company ("Mass. Electric") and Nantucket Electric Company ("Nantucket Electric") (Mass. Electric and Nantucket Electric are collectively referred to as "Companies"), I am responding to the Department's September 30, 2003 letter order in the above-captioned docket. In that letter order, the Department directed the Companies to submit a proposal for crediting the 2002 service quality penalty that addresses the goals of concentrating the credit to customers who actually experienced substandard System Average Interruption Duration Index ("SAIDI") or System Average Interruption Frequency Index ("SAIFI") performance and compensating customers who experience substandard service quality. (p. 3)

The Companies have considered different approaches to meet the Department's order to concentrate the credit to customers who actually experienced substandard service quality. The reliability indices in the Companies' service quality plans ("SQ Plans"), approved by the Department in D.T.E. 01-71B, are based on system averages. Therefore, the Companies track customer reliability at the system, and not individual customer level. Because individual customer reliability data are unavailable, it is not possible to allocate the system average information back to individual customers accurately. In addition, many customers are served from more than one distribution feeder during the course of a year. The Companies shift customers between feeders to allocate load between feeders more effectively and to maintain reliable service while the Companies address maintenance or upgrade issues on the feeders. Distribution feeders do not stop at town boundaries and often serve more than one town. These two issues, both separately and combined, introduce error into any effort to allocate the reliability credit based on feeders or municipal boundaries.

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In Mass. Electric's service territory, feeders, or groups of feeders, serve six definable geographical areas (each referred to as a "District"). These Districts, and the municipalities they encompass, are set forth in Attachment 1, Page 4. Feeders generally do not cross District boundaries, and therefore, do not serve more than one District. Although Mass. Electric may reconfigure a feeder such that it serves different customers at different times, this happens within a District. On the island of Nantucket, Nantucket Electric's infrastructure serves customers on the island only. Thus, the specific District, or the island in the case of Nantucket Electric, determines customers' reliability. In determining the service quality refund to customers, the Companies believe that it is appropriate to utilize the 2002 SAIDI and SAIFI that the Districts and the island of Nantucket experienced compared to the penalty thresholds established from the historic system-wide averages.

Accordingly, Mass. Electric proposes to refund the net service quality penalty in a manner that provides an enhanced per customer credit to customers in those Districts which experienced more customer interruptions (SAIFI) than the penalty threshold and an enhanced per kilowatthour ("kWh") credit to customers in those Districts which experienced a longer duration for customer interruptions (SAIDI) than the penalty threshold. Mass. Electric proposes a base, fixed per customer credit for SAIFI as an acknowledgement that all customer interruptions contribute to the overall system SAIFI, including those affecting customers in a District with fewer customer interruptions than the penalty threshold. Mass. Electric proposes a base per kWh credit for SAIDI as an acknowledgement that all customer minutes of interruption contribute to the system SAIDI, including those from customers in a District with fewer customer minutes of interruption than the penalty threshold. To accomplish this, Mass. Electric has developed credits individually for SAIFI and SAIDI. For each reliability measure, Mass. Electric has divided the net penalty into two parts, and proposes to refund the net penalty amounts to customers as follows: two-thirds to customers in the Districts with substandard SAIDI or SAIFI and one-third to all customers of Mass. Electric. Mass. Electric suggests that this proposed allocation provides an appropriate balance between per customer and per kWh credit allocation. The allocation of the net SAIDI and net SAIFI penalty results in the following credits:

	<u>SAIDI</u>	<u>SAIFI</u>
Substandard Performance Credit	0.097¢/kWh	\$2.07/customer
Credit to all Customers	0.041¢/kWh	\$0.65/customer

Under this proposal, the Southeast, Central, Western, Merrimack Valley, and the North Shore Districts will receive the substandard performance credit for SAIDI, and the Southeast, Central, Western, and Merrimack Valley Districts will receive the substandard performance credit for SAIFI. Nantucket Electric, which incurred a SAIDI penalty only, proposes to refund the net service quality penalty at the rate of 0.058¢ per kWh, as shown on Attachment 2. The Companies believe that this proposal meets the Department's objectives for refunding the SQ penalty to customers.

Mary L. Cottrell, Secretary

October 28, 2003

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The Companies propose that these service quality credits be applied to customer bills during the billing month of December 2003 for all bills and kWhs billed during this billing month. Attachment 3 shows the impact this credit proposal would have on a typical 500 kWh residential customer's bill. Page 1 of Attachment 3 shows this impact for Mass. Electric and Page 2 shows it for Nantucket Electric. The credits to a Mass. Electric 500 kWh residential customer range from \$0.86 to \$3.41, or a decrease of 1.5% to 5.9%, respectively. The impact to a Nantucket Electric 500 kWh residential winter bill is a decrease \$0.29, or 0.4%.


#### Commitment to Reliable Service

The Companies are committed to providing reliable service to our customers, and are implementing a very robust reliability improvement program. We have put in service four new substations and fifteen new feeders during this calendar year. We have also significantly increased our tree trimming program, addressed 1,200 overloaded transformers, and implemented a lightning protection pilot program this year. Based on performance through September 2003, we are currently on target to meet our service quality standards for duration and frequency of outages, and do not project payment of a penalty for 2003. These results are highly dynamic, however, and the Companies are carefully tracking them on an ongoing basis. In addition, we are currently meeting or exceeding all other service quality standards for 2003.

It is also worth noting that although the Companies' SQ Plans compare past reliability to present, they do not allow the Companies' poor performance in 2002 to affect the penalty thresholds by which the Companies are judged in future years. In addition, the SQ Plans could subject the Companies to a double penalty for sustained poor performance.

We appreciate your time and attention to this matter. If you have any questions on this filing, please contact me.

Very truly yours,



Amy G. Rabinowitz

cc: Joseph Rogers, Office of the Attorney General

Attachment 1

Calculation of Massachusetts Electric Company's  
Proposed Service Quality Credits

Massachusetts Electric Company  
Summary of Proposed Service Quality Credit  
Net Service Quality Penalty for Calendar Year 2002

**Section 1: SAIFI Credit Per Customer**

<u>District</u>	<u>All District SAIFI Credit (1)</u>	<u>District Specific SAIFI Credit (2)</u>	<u>Total SAIFI Credit (3)</u>
North Shore	\$0.65	n/a	\$0.65
Merrimack Valley	\$0.65	\$2.07	\$2.72
Southeast	\$0.65	\$2.07	\$2.72
South Shore	\$0.65	n/a	\$0.65
Central	\$0.65	\$2.07	\$2.72
Western	\$0.65	\$2.07	\$2.72

- (1) Page 2, Section 3, Line (3) for all districts  
(2) Page 2, Section 4, Line (3) for districts identified on Page 2, Section 2, Column (f) as having substandard SAIFI performance  
(3) Column (1) + Column (2)
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**Section 2: SAIDI Credit per kWh**

<u>District</u>	<u>All District SAIDI Credit (1)</u>	<u>District Specific SAIDI Credit (2)</u>	<u>Total SAIDI Credit (3)</u>
North Shore	\$0.00041	\$0.00097	\$0.00138
Merrimack Valley	\$0.00041	\$0.00097	\$0.00138
Southeast	\$0.00041	\$0.00097	\$0.00138
South Shore	\$0.00041	n/a	\$0.00041
Central	\$0.00041	\$0.00097	\$0.00138
Western	\$0.00041	\$0.00097	\$0.00138

- (1) Page 3, Section 3, Line (3) for all districts  
(2) Page 3, Section 4, Line (3) for districts identified on Page 2, Section 2, Column (e) as having substandard SAIDI performance  
(3) Column (1) + Column (2)

Massachusetts Electric Company  
Calculation of Proposed SAIFI Credit  
Net Service Quality Penalty for Calendar Year 2002

**Section 1: Penalty Metric for 2002**

		<u>Total</u> (a)	<u>Allocation to</u> <u>All Customers</u> (b)	<u>Allocation to</u> <u>Substandard</u> <u>Districts</u> (c)
(1)	2002 Deadband (Minimum Penalty begins after deadband):	1.304		
(2)	2002 Net Penalty Associated with SAIFI	\$2,444,182		
(3)	2000/2001 Balance Remaining of Net Penalty Credited to Customers, Allocated to SAIFI	<u>(\$40,164)</u>		
(4)	Total Amount to be Credited to Customers, Allocated to SAIFI	\$2,404,018	\$801,339	\$1,602,678

- (1) March 3, 2003 *2002 Service Quality Report*, Section 2, Page 1 of 9, Deadband Range for SAIFI  
(2) September 4, 2003 Service Quality Credit Filing, Attachment 1, Second Revision, Page 1, Line (2) @ 50%  
(3) Line (1) + Line (2)  
(b) Total of Column (a) x 1/3  
(c) Column (a) - Column (b)

**Section 2: District Results for 2002**

<u>Count</u>	<u>District</u> <u>Code</u>	<u>District</u>	<u>Average</u> <u>No. of</u> <u>Customers</u> (a)	<u>Customers</u> <u>Interrupted</u> (b)	<u>SAIFI</u> (c)	<u>December 2002</u> <u>kWh Deliveries</u> (d)	<u>Average No.</u> <u>of Customers</u> <u>Above Deadband</u> (e)
1	1 North Shore		230,066	269,060	1.17	288,948,278	0
2	2 Merrimack Valley		233,309	527,301	2.26	415,673,105	233,309
3	3 Southeast		203,716	340,066	1.67	378,557,695	203,716
4	4 South Shore		214,729	193,327	0.90	301,860,117	0
5	5 Central		219,182	426,315	1.95	388,476,900	219,182
6	6 Western		<u>114,326</u>	237,886	2.08	<u>172,494,310</u>	<u>114,326</u>
			1,215,328			1,946,010,405	770,533

- (a) Represents 12 month average number of customers per Company billing system for calendar year 2002  
(b) Per outage reporting system, for calendar year 2002  
(c) Column (b) ÷ Column (a)  
(d) Per Company billing system  
(e) Column (a) for those Districts having a SAIFI exceeding Section 1, Line (1)

**Section 3: SAIFI Credit Applicable to All Districts**

(1)	Net Penalty Attributable to SAIFI Allocated to All Districts	\$801,339
(2)	Average Number of Customers for All Districts	<u>1,215,328</u>
(3)	Net Penalty Attributable to SAIFI per Customer for All Districts	\$0.65
(1)	Section 1, Column (b)	
(2)	Section 2, Column (a)	
(3)	Line (1) ÷ Line (2), truncated after 2 decimal places	

**Section 4: SAIFI Credit Applicable to Districts with SAIFI Exceeding Deadband**

(1)	Net Penalty Attributable to SAIFI Allocated to Districts with SAIFI Exceeding Deadband	\$1,602,678
(2)	Average Number of Customers for Districts with SAIFI Exceeding Deadband	<u>770,533</u>
(3)	Net Penalty Attributable to SAIFI per Customer for Districts with SAIFI Exceeding Deadband	\$2.07
(1)	Section 1, Column (c)	
(2)	Section 2, Column (f)	
(3)	Line (1) ÷ Line (2), truncated after 2 decimal places	

Massachusetts Electric Company  
Calculation of Proposed SAIDI Credit  
Net Service Quality Penalty for Calendar Year 2002

**Section 1: Penalty Metric for 2002**

		<u>Total</u> (a)	<u>Allocation to</u> <u>All Customers</u> (b)	<u>Allocation to</u> <u>Substandard</u> <u>Districts</u> (c)
(1)	2002 Deadband (Minimum Penalty begins after deadband):	105.52		
(2)	2002 Net Penalty Associated with SAIDI	\$2,444,182		
(3)	2000/2001 Balance Remaining of Net Penalty Credited to Customers, Allocated to SAIDI	<u>(\$40,164)</u>		
(4)	Total Amount to be Credited to Customers, Allocated to SAIDI	\$2,404,018	\$801,339	\$1,602,678

- (1) March 3, 2003 *2002 Service Quality Report*, Section 2, Page 1 of 9, Deadband Range for SAIDI  
(2) September 4, 2003 Service Quality Credit Filing, Attachment 1, Second Revision, Page 1, Line (2) @ 50%  
(3) Line (1) + Line (2)  
(b) Total of Column (a) x 1/3  
(c) Column (a) - Column (b)

**Section 2: District Results for 2002**

<u>Count</u>	<u>District</u> <u>Code</u>	<u>District</u>	<u>Average</u> <u>No. of</u> <u>Customers</u> (a)	<u>Customer</u> <u>Minutes</u> <u>Interrupted</u> (b)	<u>SAIDI</u> (c)	<u>December 2002</u> <u>kWh Deliveries</u> (d)	<u>December 2002</u> <u>kWh Deliveries</u> <u>Above Deadband</u> (e)
1	1	North Shore	230,066	28,839,818	125.35	288,948,278	288,948,278
2	2	Merrimack Valley	233,309	51,638,955	221.33	415,673,105	415,673,105
3	3	Southeast	203,716	29,741,193	145.99	378,557,695	378,557,695
4	4	South Shore	214,729	13,950,531	64.97	301,860,117	0
5	5	Central	219,182	74,044,048	337.82	388,476,900	388,476,900
6	6	Western	<u>114,326</u>	24,818,779	217.09	<u>172,494,310</u>	<u>172,494,310</u>
			1,215,328			1,946,010,405	1,644,150,288

- (a) Represents 12 month average number of customers per Company billing system  
(b) Per outage reporting system  
(c) Column (b) ÷ Column (a)  
(d) Per Company billing system  
(e) Column (d) for those Districts having a SAIDI exceeding Section 1, Line (1)

**Section 3: SAIDI Credit Applicable to All Districts**

(1)	Net Penalty Attributable to SAIDI Allocated to All Districts	\$801,339
(2)	December 2002 kWh Deliveries for All Districts	<u>1,946,010,405</u>
(3)	Net Penalty Attributable to SAIDI per kWh for All Districts	\$0.00041
(1)	Section 1, Column (b)	
(2)	Section 2, Column (d)	
(3)	Line (1) ÷ Line (2), truncated after 5 decimal places	

**Section 4: SAIDI Credit Applicable to Districts with SAIDI Exceeding Deadband**

(1)	Net Penalty Attributable to SAIDI Allocated to Districts with SAIDI Exceeding Deadband	\$1,602,678
(2)	December 2002 kWh Deliveries for Districts with SAIDI Exceeding Deadband	<u>1,644,150,288</u>
(3)	Net Penalty Attributable to SAIDI per kWh for Districts with SAIDI Exceeding Deadband	\$0.00097
(1)	Section 1, Column (c)	
(2)	Section 2, Column (e)	
(3)	Line (1) ÷ Line (2), truncated after 5 decimal places	

Massachusetts Electric Company  
kWhs and Customers  
By District

District Code	Town Code	Town	December 2002 kWh Deliveries	Average No. of Customers
<b>North Shore</b>				
1	11	MEDFORD	30,002,072	23,269
1	12	MALDEN	26,626,242	25,019
1	13	MELROSE	11,047,180	11,492
1	14	EVERETT	23,852,792	17,703
1	18	REVERE	21,469,500	20,021
1	19	WINTHROP	6,963,038	8,037
1	31	LYNN	39,977,542	36,667
1	32	SAUGUS	19,473,487	11,138
1	35	NAHANT	1,611,801	1,702
1	36	SWAMPSCOTT	7,575,050	5,935
1	71	SALEM	28,982,505	19,530
1	81	BEVERLY	29,805,499	17,982
1	83	HAMILTON	3,588,642	2,866
1	84	WENHAM	2,386,298	1,457
1	85	TOPSFIELD	2,813,543	2,437
1	87	MANCHESTER	3,090,649	2,615
1	91	GLOUCESTER	23,099,838	15,358
1	92	ROCKPORT	4,486,383	4,910
1	93	ESSEX	<u>2,096,217</u>	<u>1,929</u>
			288,948,278	230,067
<b>Merrimack Valley</b>				
2	21	LOWELL	63,880,569	41,005
2	22	DRACUT	11,472,583	11,952
2	23	CHELMSFORD	28,877,440	14,893
2	24	TEWKSBURY	21,914,732	11,571
2	25	BILLERICA	42,960,075	14,995
2	26	WESTFORD	20,832,055	8,387
2	27	TYNGSBORO	7,644,185	4,575
2	41	LAWRENCE	42,250,919	28,017
2	42	METHUEN	26,012,729	18,810
2	43	ANDOVER	48,964,589	12,748
2	44	N ANDOVER	24,550,811	11,082
2	45	BOXFORD	4,111,255	2,949
2	61	HAVERHILL	37,202,804	26,062
2	62	NEWBURYPORT	14,963,561	9,607
2	63	NEWBURY	4,289,863	3,172
2	64	W NEWBURY	2,324,635	1,611
2	65	AMESBURY	8,590,354	7,215
2	66	SALISBURY	<u>4,829,946</u>	<u>4,657</u>
			415,673,105	233,308
<b>Southeast</b>				
3	131	FRANKLIN	34,016,484	11,698
3	132	FOXBORO	13,682,768	7,235
3	133	PLAINVILLE	5,400,551	3,844
3	134	WRENTHAM	8,792,239	4,438
3	135	BELLINGHAM	5,414,093	4,697
3	140	UXBRIDGE	6,672,432	5,298
3	141	NORTHBRIDGE	8,491,868	6,314
3	142	BLACKSTONE	3,448,010	3,626
3	143	DOUGLAS	3,982,517	3,496
3	144	MILLVILLE	1,179,469	1,170
3	146	MENDON	3,138,459	2,249
3	151	HOPEDALE	3,341,859	2,375
3	152	MILFORD	27,763,400	11,780
3	153	UPTON	3,521,241	2,695
3	181	MARLBORO	48,407,410	17,348
3	184	NORTHBOROUGH	10,321,844	5,735
3	185	SOUTHBOROUGH	12,286,979	3,748
3	186	WESTBOROUGH	32,775,525	7,514
3	262	FALL RIVER	60,410,463	43,141
3	263	WESTPORT	3,637,034	2,679
3	268	SOMERSET	8,558,206	7,661
3	269	SWANSEA	8,369,399	6,911
3	271	ATTLEBORO	35,671,813	18,785
3	272	NORTON	10,416,637	6,804
3	273	REHOBOTH	5,005,556	4,318
3	274	SEEKONK	10,989,901	6,007
3	275	DIGHTON	<u>2,861,538</u>	<u>2,153</u>
			378,557,695	203,719
<b>South Shore</b>				
4	121	WEYMOUTH	33,012,490	23,861
4	122	HINGHAM	537,317	78
4	123	RANDOLPH	15,168,248	12,473
4	124	HOLBROOK	5,894,038	4,595
4	125	COHASSET	4,290,014	3,394
4	129	QUINCY	59,445,290	41,547
4	136	STOUGHTON	16,305,864	11,617
4	137	SHARON	82,666	62
4	138	AVON	6,271,510	2,122
4	251	HANSON	4,577,419	3,819
4	254	HALIFAX	3,156,893	3,167
4	256	PEMBROKE	9,337,124	6,911
4	258	NORWELL	8,682,903	4,169
4	259	SCITUATE	7,837,480	7,744
4	280	WHITMAN	6,489,024	5,765
4	281	BROCKTON	50,840,558	38,645
4	282	ABINGTON	7,485,067	6,178
4	284	EASTON	16,640,360	8,802
4	285	W BRIDGEWATER	4,782,684	3,272
4	286	ROCKLAND	11,231,358	7,399
4	287	E BRIDGEWATER	6,193,894	5,032
4	288	HANOVER	10,033,141	5,462
4	289	BRIDGEWATER	<u>13,564,775</u>	<u>8,618</u>
			301,860,117	214,732

District Code	Town Code	Town	December 2002 kWh Deliveries	Average No. of Customers
<b>Central</b>				
5	145	SUTTON	5,258,115	3,667
5	147	MILLBURY	10,892,281	5,518
5	148	GRAFTON	9,598,709	6,668
5	149	AUBURN	16,337,829	7,510
5	182	BOLTON	3,918,306	1,724
5	183	BERLIN	1,475,492	1,167
5	191	WORCESTER	136,116,494	75,131
5	192	LEICESTER	4,761,355	3,909
5	311	WINCHENDON	4,762,305	4,218
5	321	GARDNER	14,406,983	9,860
5	322	WESTMINSTER	6,966,953	3,104
5	323	HUBBARDSTON	1,725,859	1,722
5	333	RUTLAND	3,180,137	2,851
5	334	OAKHAM	792,397	914
5	335	NEW BRAINTREE	680,095	413
5	341	LEOMINSTER	44,123,857	18,662
5	342	SHIRLEY	5,176,627	2,631
5	343	AYER	9,069,249	3,629
5	351	CLINTON	12,557,810	6,123
5	352	LANCASTER	3,806,890	2,429
5	353	HARVARD	3,049,700	2,205
5	361	PEPPERELL	5,359,127	4,691
5	362	DUNSTABLE	1,251,140	1,148
5	364	GROTON	1,859,200	1
5	371	SOUTHBRIDGE	12,405,032	8,275
5	375	STURBRIDGE	12,607,506	4,200
5	376	CHARLTON	9,176,795	5,120
5	381	WEBSTER	12,689,333	8,879
5	382	OXFORD	9,825,729	5,875
5	383	DUDLEY	7,086,346	4,639
5	431	SPENCER	8,447,830	5,667
5	441	BROOKFIELD	1,608,907	1,602
5	442	E BROOKFIELD	1,023,773	1,042
5	443	N BROOKFIELD	4,382,992	2,163
5	444	W BROOKFIELD	<u>2,095,747</u>	<u>1,828</u>
			388,476,900	219,185
<b>Western</b>				
6	301	ATHOL	6,942,905	5,558
6	302	ROYALSTON	513,334	680
6	303	ORANGE	5,875,263	3,926
6	304	WARWICK	269,900	428
6	305	ERVING	3,979,416	384
6	306	WENDELL	369,708	469
6	307	SHUTESBURY	688,165	826
6	308	NEW SALEM	469,689	479
6	324	PHILLIPSTON	716,379	848
6	331	BARRE	2,755,420	2,225
6	332	PETERSHAM	594,069	539
6	372	WALES	1,193,849	935
6	373	BRIMFIELD	1,887,394	1,646
6	374	HOLLAND	1,367,823	1,427
6	401	E LONGMEADOW	17,849,008	6,278
6	402	HAMPDEN	2,435,408	2,038
6	411	PALMER	9,832,964	6,375
6	412	MONSON	4,910,223	3,628
6	413	WARREN	3,390,758	2,272
6	414	WILBRAHAM	7,337,477	5,710
6	421	WARE	7,163,944	4,875
6	422	HARDWICK	1,570,687	1,361
6	423	GRANBY	2,953,454	2,511
6	424	BELCHERTOWN	7,010,361	5,889
6	501	CHARLEMONT	755,233	795
6	502	HAWLEY	146,118	218
6	503	HEATH	339,034	602
6	504	ROWE	503,761	248
6	511	N ADAMS	9,164,473	7,598
6	512	CHESHIRE	1,457,196	1,655
6	513	CLARKSBURG	635,702	787
6	514	FLORIDA	319,035	403
6	515	HANCOCK	1,650,298	619
6	516	WILLIAMSTOWN	7,716,349	3,516
6	517	MONROE	530,766	97
6	518	ADAMS	8,206,705	4,828
6	541	NORTHAMPTON	22,214,376	14,097
6	542	GOSHEN	460,685	619
6	543	WILLIAMSBURG	1,335,422	1,344
6	571	GT BARRINGTON	8,349,180	4,373
6	572	ALFORD	399,854	344
6	573	EGREMONT	1,483,483	992
6	574	MONTEREY	699,014	940
6	575	MT WASHINGTON	184,792	172
6	576	NEW MARLBORO	1,266,190	1,093
6	577	SHEFFIELD	4,928,236	1,985
6	578	STOCKBRIDGE	2,192,038	1,785
6	579	W STOCKBRIDGE	815,611	945
6	581	LENOX	<u>4,663,161</u>	<u>2,963</u>
			172,494,310	114,325
Total All Districts			1,946,010,405	1,215,336



Attachment 2

Calculation of Nantucket Electric Company's  
Proposed Service Quality Credit

Nantucket Electric Company  
Calculation of \$/kWh Credit Factor for 2002 Net Service Quality Penalty  
One Month Credit in December 2003

(1)	2002 Net Service Quality Penalty Attributable to Nantucket Electric	\$6,542
(2)	Forecasted December 2003 kWh Deliveries	<u>11,174,172</u>
(3)	Proposed per kWh Service Quality Credit	\$0.00058

Note:

As Nantucket Electric did not incur a penalty related to SAIFI, it has not calculated a per-customer credit, but only a per kWh credit for SAIDI in the amount of the net penalty of \$6,542.

- (1) March 3, 2003 *2002 Service Quality Report* filing for Nantucket Electric in DTE 03-20, Section 2, Page 1 of 9 of \$6,542
- (2) Per Company forecast, reflects Nantucket Electric
- (3) Line (1) ÷ Line (2), truncated to 5 decimal places

Attachment 3

Typical Residential Customer Bill Impacts

Massachusetts Electric Company  
Impact on 500 kWh Typical Bill  
One Month Credit in December 2003

**Section 1: Proposed Rates**

	Performance Met Expected SAIDI and SAIFI Goals		Performance Met Expected SAIFI Goals		Performance Did Not Meet SAIDI and SAIFI Goals	
Typical Residential Monthly Usage	500		500		500	
Per Customer Credit Per Attachment 1, Page 1, Section 1	(\$0.65)		(\$0.65)		(\$2.72)	
Per kWh Credit Per Attachment 1, Page 1, Section 2	(\$0.00041)		(\$0.00138)		(\$0.00138)	
Customer Charge	\$5.81	\$5.81	\$5.81	\$5.81	\$5.81	\$5.81
Distribution Energy Charge	\$0.02398	\$11.99	\$0.02398	\$11.99	\$0.02398	\$11.99
Transition Charge	\$0.01002	\$5.01	\$0.01002	\$5.01	\$0.01002	\$5.01
Transmission Charge	\$0.00660	\$3.30	\$0.00660	\$3.30	\$0.00660	\$3.30
Demand Side Management Charge	\$0.00250	\$1.25	\$0.00250	\$1.25	\$0.00250	\$1.25
Renewables Charge	\$0.00050	\$0.25	\$0.00050	\$0.25	\$0.00050	\$0.25
Service Quality Credit		<u>(\$0.86)</u>		<u>(\$1.34)</u>		<u>(\$3.41)</u>
Subtotal		\$26.75		\$26.27		\$24.20
Standard Offer Charge	\$0.06124	<u>\$30.62</u>	\$0.06124	<u>\$30.62</u>	\$0.06124	<u>\$30.62</u>
Total		\$57.37		\$56.89		\$54.82

**Section 2: Present Rates**

Customer Charge	\$5.81	\$5.81	\$5.81	\$5.81	\$5.81	\$5.81
Distribution Energy Charge	\$0.02398	\$11.99	\$0.02398	\$11.99	\$0.02398	\$11.99
Transition Charge	\$0.01002	\$5.01	\$0.01002	\$5.01	\$0.01002	\$5.01
Transmission Charge	\$0.00660	\$3.30	\$0.00660	\$3.30	\$0.00660	\$3.30
Demand Side Management Charge	\$0.00250	\$1.25	\$0.00250	\$1.25	\$0.00250	\$1.25
Renewables Charge	\$0.00050	<u>\$0.25</u>	\$0.00050	<u>\$0.25</u>	\$0.00050	<u>\$0.25</u>
Subtotal		\$27.61		\$27.61		\$27.61
Standard Offer Charge	\$0.06124	<u>\$30.62</u>	\$0.06124	<u>\$30.62</u>	\$0.06124	<u>\$30.62</u>
Total		\$58.23		\$58.23		\$58.23

**Section 3: Impact**

\$ Increase (Decrease)		(\$0.86)		(\$1.34)		(\$3.41)
% Increase (Decrease)		-1.48%		-2.30%		-5.86%

**Section 4: Districts**

South Shore

North Shore

Merrimack Valley  
Southeast  
Central  
Western

Nantucket Electric Company  
Impact on 500 kWh Typical Bill  
One Month Credit in December 2003

**Section 1: Proposed Rates**

Typical Residential Monthly Usage	500
Per kWh Credit Per Attachment 2, Line (3)	(\$0.00058)

Customer Charge	\$5.81	\$5.81
Distribution Energy Charge	\$0.02398	\$11.99
Transition Charge	\$0.01002	\$5.01
Transmission Charge	\$0.00660	\$3.30
Demand Side Management Charge	\$0.00250	\$1.25
Renewables Charge	\$0.00050	\$0.25
Cable Facilities Surcharge-Winter	\$0.01544	\$7.72
Service Quality Credit	(\$0.00058)	<u>(\$0.29)</u>
Subtotal		\$35.04
Standard Offer Charge	\$0.06124	<u>\$30.62</u>
Total		\$65.66

**Section 2: Present Rates**

Customer Charge	\$5.81	\$5.81
Distribution Energy Charge	\$0.02398	\$11.99
Transition Charge	\$0.01002	\$5.01
Transmission Charge	\$0.00660	\$3.30
Demand Side Management Charge	\$0.00250	\$1.25
Renewables Charge	\$0.00050	\$0.25
Cable Facilities Surcharge-Summer	\$0.01544	<u>\$7.72</u>
Subtotal		\$35.33
Standard Offer Charge	\$0.06124	<u>\$30.62</u>
Total		\$65.95

**Section 3: Impact**

\$ Increase (Decrease)	(\$0.29)
% Increase (Decrease)	-0.44%